Rubiacearum Americanarum Magna Hama Pars I.1 A New Species of Chomelia from Panama

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Abstract. The new species Chomelia rubra Lorence & C. M. Taylor, described and illustrated here, is known only from central Panama. This new species has red to pink flowers that are sessile and solitary or few in subsessile short cymules. This new species has previously been confused with C. recordii Standley.

Resumen. La especie nueva Chomelia rubra Lorence & C. M. Taylor, aquí descrita e ilustrada, está registrada solamente de Panamá central. Esta especie nueva tiene flores rojas a rosadas, y sésiles y solitarias o pocas en címulas corta subsésiles. Anteriormente esta especie nueva ha sido confundida con Ch. recordii Standley.

Key words: Chomelia, Mesoamerica, Panama, Rubiaceae.

During study of recent Rubiaceae collections for the Flora Mesoamericana, a number of undescribed species have been discovered, and taxonomic changes for other species have become indicated. This article is the first of a series presenting this new information in detail, beyond that allowed by the synoptic format of the Flora Mesoamericana.

Chomelia Jacquin (Guettardeae) comprises about 50 (Steyermark, 1974) to 76 (Andersson, 1992) species found in the Neotropics, from central Mexico to Paraguay. This genus is characterized by axillary inflorescences, a four-lobed to rarely truncate (e.g., C. microloba Donnell Smith) calyx, tubular to salverform corollas with four valvate or valvate-induplicate lobes, four stamens, and drupaceous fruits with a single 2- to 3-celled pyrene. Some species have leaves with distinctive closely lineolate (i.e., closely set and parallel) tertiary leaf venation and scorpioid cymes. Anisomeris C. Presl was formerly separated from Chomelia based on its produced on stems below the leaves), 1 to 5, sessile

valvate-induplicate corolla lobes with the margins crisped and sometimes also appendaged, but careful study of this feature disclosed that it shows continuous variation and sometimes varies within a single species; therefore these two genera are better combined (Steyermark, 1967). The neotropical genus Chomelia Jacquin should not be confused with Chomelia L., which is a synonym of the wholly paleotropical genus Tarenna Gaertner (Pavetteae).

Chomelia rubra Lorence & C. M. Taylor, sp. nov. TYPE: Panama. Colón: Santa Rita camino a zona maderera, 10 Oct. 1968, M. D. Correa A. & R. L. Dressler 1092 (holotype, PMA; isotypes, DUKE-265877, MO-2393591). Figure 1.

Haec species Chomelia recordii Standley similis, sed ab ea lobulis calycinis 1-2 mm longis atque corollae rubrae vel roseae extus strigulosae lobulis ca. 2.5 mm longis obtusis vel rotundatis distinguitur.

Shrubs, treelets, or trees to 4 m tall, unarmed; branchlets strigulose to glabrescent. Leaves ovate to elliptic-ovate, $2.2-11 \times 1.2-6$ cm, chartaceous to subcoriaceous, adaxially glabrous, abaxially hirtellous to glabrescent, at base rounded to truncate or cordulate, at apex acute to somewhat acuminate with the acumen ultimately acute and apiculate; costa plane to prominulous adaxially, prominulous to prominent abaxially; secondary veins 3 to 7 pairs, eucamptrodromous to brochidodromous, in axils with foveolate ("crypt type") domatia, the axils and/or the domatia glabrous or usually pilosulous; minor venation not or weakly visible and apparently not lineolate; petioles 1-4 mm long; stipules persistent or caducous, triangular, 2-3.5 mm long, acute to acuminate, externally strigulose. Flowers axillary (i.e., produced with the leaves) and/or ramular (i.e.,

^{1 &}quot;A Big Bucket of American Rubiaceae," of which the present contribution contains the first few drops.

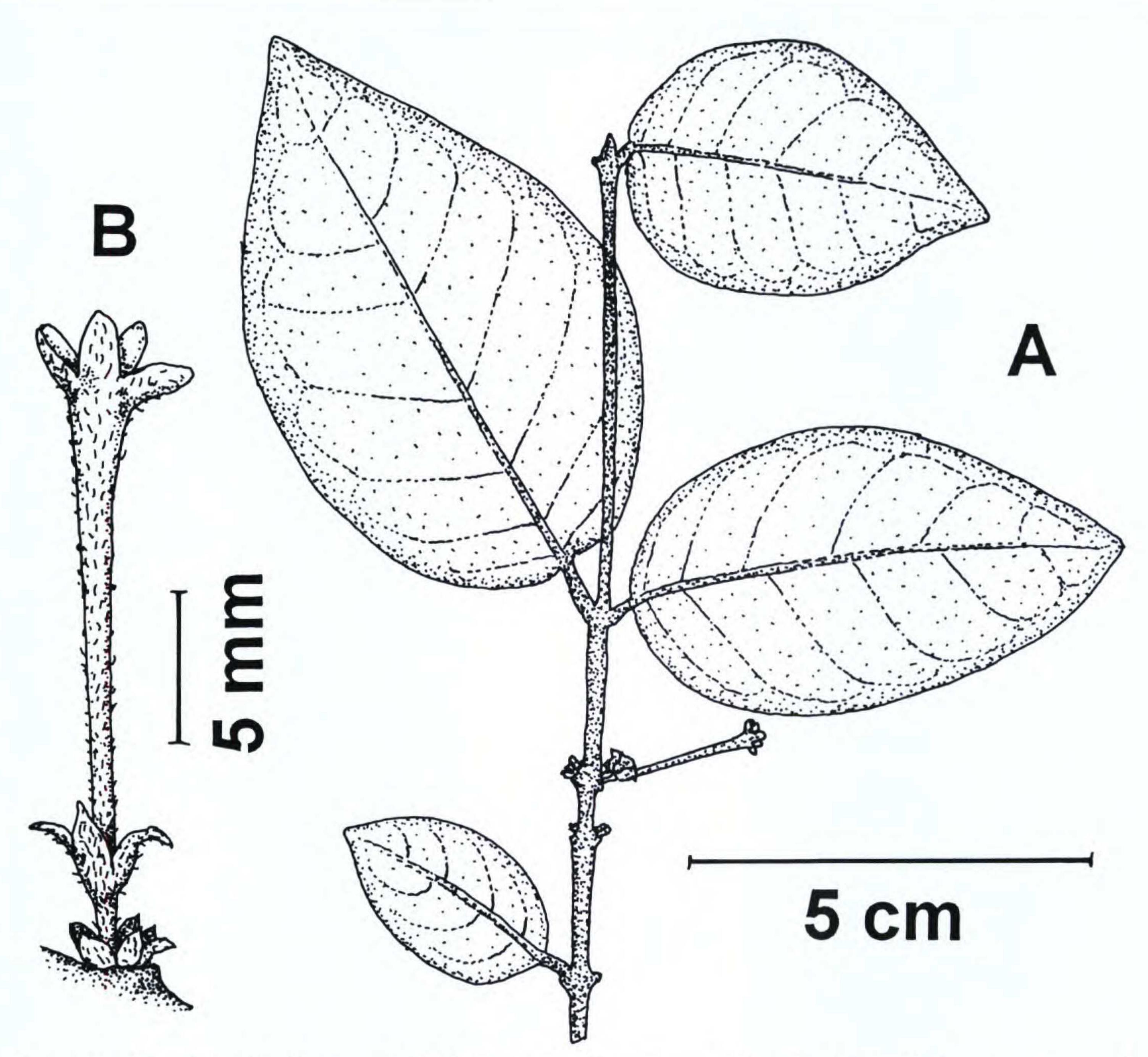


Figure 1. Chomelia rubra Lorence & C. M. Taylor; based on Correa & Dressler 1092.—A. Flowering stem. —B. Inflorescence with flower.

and solitary or subsessile in a congested cymule, this cymule sessile to subsessile; bracts triangular to linear, 0.1-0.8 mm long, acute, strigulose; hypanthium turbinate, ca. 1 mm long, densely strigulose; calyx limb externally strigulose, with tube 0.5-1 mm long, lobes 4, linear to triangular, 1-2 mm long and sometimes unequal on an individual flower, acute; corolla in bud clavate, at anthesis tubular, red to pink, externally strigulose except glabrous on margins of lobes, with tube 15-16 mm long, lobes 4, elliptic, ca. 2.5 mm long, obtuse to rounded, entire; anthers 4, ca. 2.5 mm long, partially exserted; stigmas oblong, ca. 1 mm long, situated ca. 34 the length of the corolla tube above its base. Fruits oblong, ca. 15 × 6 mm, slightly flattened laterally, glabrescent; pyrenes smooth, 2celled.

Habitat, distribution, and phenology. Moist for-

ests at 300-500 m in central Panama; collected with flowers in June and October, with fruits in January.

This new species is similar in general aspect and many details to *Chomelia recordii*, and these have previously been confused. *Chomelia recordii*, however, has leaves that are apically acuminate with the acumen ultimately rounded to obtuse, flowers that are solitary or paired and terminal or axillary, hypanthium 1.5–2 mm long, calyx limb with the tube 1–3 mm long and the lobes 2–4 mm long, corolla white to cream and externally pilose to sericeous, corolla lobes 4–5 mm long and acute, and fruits 7–10 × 4–5 mm and strigulose to hirtellous. The specific epithet refers to the color of the flowers of this new species, which is unusual in *Chomelia*.

Paratypes. PANAMA. Coclé: Coclecito Road, elevational transect from 1 mi. beyond the divide to the ridge

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top, 8°42′N, 80°28′W, de Nevers et al. 6759 (MO). Colón: Santa Rita lumber road, ca. 15 km E of Colón, Dressler & Correa 3727 (MO); Santa Rita lumber road, 8.7 km E of Transisthmia Highway, Folsom 3696 (MO).

Acknowledgments. We thank the curators of DUKE, F, and PMA for access to specimens and information, and in particular Mireya Correa; Roy E. Gereau for preparation of the Latin diagnosis; two anonymous reviewers for constructive comments on the manuscript; and Robin Foster and the Field Museum of Natural History for support for

travel by the second author to consult that collection.

Literature Cited

Andersson, L. 1992. A provisional checklist of neotropical Rubiaceae. Scripta Bot. Belg. 1: 1–199.

Steyermark, J. A. 1967. Chomelia. In: B. M. Maguire & Collaborators, The Botany of the Guayana Highlands. Mem. New York Bot. Gard. 17(1): 333–341.

————. 1974. Rubiaceae. In: T. Lasser (editor), Flora de Venezuela 9: 1–2070. Instituto Botánico, Dirección de Recursos Naturales Renovables, Ministerio de Agricultura y Cría. Caracas, Venezuela.